

CLAIMS LISTING

1. (currently amended) A stimuable phosphor screen or panel suitable for use in mammographic applications comprising a binderless phosphor layer having needle-shaped crystals, said layer not exceeding a layer thickness of 150 μm , and a support wherein an intermediate layer arrangement of an X-ray absorbing foil or layer ~~absorbing x-rays to a lower extent, and avoiding scattering to a great extent,~~ and, farther from the support, a stimulated light reflecting foil is present between said support and said phosphor layer.
2. (previously presented) A stimuable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises an X-ray absorbing layer comprising a binder wherein said binder is a matrix of a polycondensation product of a metal alkoxide species, and an oxide or a hydroxide of lead metal is dispersed in said binder.
3. (original) A stimuable phosphor screen or panel according to claim 2, wherein said binder containing the lead compound is a matrix of an inorganic network of alkoxymetal substituted organic polymers or copolymers matrix.

- 4.(original) A stimuable phosphor screen or panel according to claim 3, wherein said matrix is derived from a cross-linking agent selected from the group consisting of dialkoxysilanes, trialkoxysilanes, tetraalkoxysilanes, titanates, zirconates and aluminates; and a colloid of silica, and wherein said matrix comprises a colloid of an oxide or a hydroxide of lead metal.
- 5.(original) A stimuable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises, as an X-ray absorbing layer a layer of lead.
- 6.(original) A stimuable phosphor screen or panel according to claim 1, wherein as a stimulated light reflecting foil an aluminum layer is present.
- 7.(original) A stimuable phosphor screen or panel according to claim 2, wherein as a stimulated light reflecting foil an aluminum layer is present.
- 8.(cancelled)
- 9.(cancelled)
- 10.(cancelled)
- 11.(original) A phosphor screen or panel according to claim 1, wherein said support is selected from the group consisting of ceramics, glass, amorphous carbon, aluminum and polymeric films.

12.(original) A phosphor screen or panel according to claim 6,
wherein said support is selected from the group consisting
of ceramics, glass, amorphous carbon, aluminum and
polymeric films.

13.(original) A phosphor screen or panel according to claim 1,
wherein said intermediate layer arrangement has a surface
that has been subjected to embossing for forming a fine
concavo-convex pattern.

14.(original) A phosphor screen or panel according to claim 6,
wherein said intermediate layer arrangement has a surface
that has been subjected to embossing for forming a fine
concavo-convex pattern.

15.(cancelled)

16.(cancelled)

17.(original) A phosphor screen or panel according to claim 1,
having between said intermediate layer arrangement and the
support a moisture-repellent parylene layer.

18.(original) A phosphor screen or panel according to claim 6,
having between said intermediate layer arrangement and the
support a moisture-repellent parylene layer.

19.(cancelled)

20.(cancelled)

- 21.(original) A phosphor screen or panel according to claim 1,
having between said intermediate layer arrangement and the
phosphor layer a moisture-repellent parylene layer.
- 22.(original) A phosphor screen or panel according to claim 6,
having between said intermediate layer arrangement and the
phosphor layer a moisture-repellent parylene layer.
- 23.(cancelled)
- 24.(cancelled)
- 25.(original) A phosphor screen or panel according to claim 1,
having between said intermediate layer arrangement and the
phosphor layer and between said intermediate layer
arrangement and the support a moisture-repellent parylene
layer.
- 26.(original) A phosphor screen or panel according to claim 6,
having between said intermediate layer arrangement and the
phosphor layer and between said intermediate layer
arrangement and the support a moisture-repellent parylene
layer.
- 27.(cancelled)
- 28.(cancelled)
- 29.(cancelled)
- 30.(cancelled)
- 31.(cancelled)

32.(cancelled)

33.(cancelled)

34.(previously presented) A binderless stimuable phosphor screen or panel according to claim 1, wherein said needle-shaped phosphor crystals are crystals of an alkali metal halide phosphor.

35.(previously presented) A binderless stimuable phosphor screen or panel according to claim 2, wherein said needle-shaped phosphor crystals are crystals of an alkali metal halide phosphor.

36.(cancelled)

37.(previously presented) A binderless stimuable phosphor screen according to claim 34, wherein said alkali metal halide phosphor is a CsX:Eu stimuable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

38.(previously presented) A binderless stimuable phosphor screen according to claim 35, wherein said alkali metal halide phosphor is a CsX:Eu stimuable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

39.(cancelled)

40.(cancelled)

41.(cancelled)

42.(cancelled)

43.(cancelled)

44.(cancelled)

45.(previously presented) A phosphor screen or panel
according to claim 1, wherein said x-ray absorbing foil or
layer has a thickness in the range of 25 to 150 μm .

46.(previously presented) A phosphor screen or panel
according to claim 2, wherein said said x-ray absorbing
foil or layer has a thickness in the range of 25 to 150 μm .

47.(previously presented) A phosphor screen or panel
according to claim 5, wherein said said x-ray absorbing
foil or layer has a thickness in the range of 25 to 150 μm .

48.(previously presented) A phosphor screen or panel
according to claim 6, wherein said aluminum layer has a
thickness in the range of 0.5 μm to 5 μm .

49.(previously presented) A phosphor screen or panel
according to claim 7, wherein said aluminum layer has a
thickness in the range of 0.5 μm to 5 μm .

50.(previously presented) A phosphor screen or panel
according to claim 1, wherein said support is a PET support
having a thickness in the range from 100 μm to 1000 μm .

- 51.(previously presented) A phosphor screen or panel
according to claim 2, wherein said support is a PET support
having a thickness in the range from 100 μm to 1000 μm .
- 52.(previously presented) A phosphor screen or panel
according to claim 5, wherein said support is a PET support
having a thickness in the range from 100 μm to 1000 μm .
- 53.(previously presented) A phosphor screen or panel
according to claim 6, wherein said support is a PET support
having a thickness in the range from 100 μm to 1000 μm .
- 54.(previously presented) A phosphor screen or panel
according to claim 7, wherein said support is a PET support
having a thickness in the range from 100 μm to 1000 μm .
- 55.(previously presented) A phosphor screen or panel
according to claim 1, wherein said support is an amorphous
carbon support having a thickness in the range from 100 μm
to 3000 μm .
- 56.(previously presented) A phosphor screen or panel
according to claim 2, wherein said support is an amorphous
carbon support having a thickness in the range from 100 μm
to 3000 μm .
- 57.(previously presented) A phosphor screen or panel
according to claim 5, wherein said support is an amorphous

carbon support having a thickness in the range from 100 μm
to 3000 μm .

58.(previously presented) A phosphor screen or panel
according to claim 6, wherein said support is an amorphous
carbon support having a thickness in the range from 100 μm
to 3000 μm .

59.(previously presented) A phosphor screen or panel
according to claim 7, wherein said support is an amorphous
carbon support having a thickness in the range from 100 μm
to 3000 μm .